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ABSTRACT

Profiles are presented of each of the 10 consortia that make up the California Health Services/Education Activities (HS/EA) network (new relationships between educational facilities where health care manpower is trained in the community settings where they practice). The first part of the booklet is a comparative analysis of (1) Area Health Education Centers (AHEC's), as funded by the Bureau of Health Manpower Education based on recommendations of the Carnegie Commission on Higher Education, and (2) Health Services/Educational Activities (HS/EAs), as developed and funded by California Regional Medical Programs (RMP) Service of the Health Services and Mental Health Administration, U.S. Department of Health, Education, and Welfare. Focus in the analysis is on differences and similarities in administration, funding, role of the community, activities, consumer input, and support in the two programs, both of which are currently in operation. Each of the 10 consortia profiles lists the director, consortium address, service area population, and member institutions followed by summary information about the background of the service area, goals established for the consortium, and the current and planned activities which have emerged from the initial grant from the California RMP. (The 10 consortia are Sonoma County, Superior California, Santa Clara, San Joaquin Valley, Kern County, San Fernando Valley, Pomona Valley, East Los Angeles, Loma Linda, and San Diego and Imperial Counties.) (JT)

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CALIFORNIA HEALTH SERVICES/EDUCATIONAL ACTIVITIES CONSORTIUM NETWORK

by

Charles H. White, Ph.D.

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INTRODUCTION

The Carnegie Commission on Higher Education recommended the development of Area Health Education Centers. AHEC's should extend university health science programs to rural areas with underserved health needs. Regional Medical Programs' skill and experience in developing cooperative arrangements between individuals and groups concerned with health care offered a unique opportunity to develop a different AHEC form. RMP defined new relationships between educational facilities where health care manpower trained and community settings where they practiced. Both organizational forms were funded and are currently in operation. A network of 10 consortia of schools, colleges, hospitals, and agencies now exists in the California RMP, called Health Services/Educational Activities projects. They help translate health care delivery priorities into manpower needs and educational training programs to meet those needs. A unique regional coordination effort offers the opportunity for maximum effectiveness in improving the health care delivery system by intervention at the manpower training level.

A COMPARATIVE ANALYSIS OF AREA HEALTH EDUCATION CENTERS (AHEC's)

AND HEALTH SERVICES/EDUCATIONAL ACTIVITIES (HS/EA's)

It would be difficult to demonstrate a more clear example of the "idea whose time has come" phenomenon than the sudden rise of consortia for health manpower education. Scarcely a year elapsed after the publication of the Report of the Carnegie Commission until planning guidelines were proposed, proposals were developed in less than 18 months, and a funded network of projects was in existence in California before the second anniversary occurred.

In its landmark document, the Commission "recommended the development of new area health education centers, to be located on the basis of careful regional planning."[1] Such centers of AHEC's could be located in rural areas with small population clusters at a distance from university health science centers. Another recommendation urged university health science centers to become responsible for coordination of the education of health care personnel while assuming research responsibility and cooperation with other community agencies for solving problems of health care delivery.[2] Thus, an AHEC could also be located in urban areas which need more than their present training facilities, but less than full-scale health science centers.

Further definition of AHEC's by the Commission included status as affiliated satellites of universities. Educational programs would be developed and supervised by faculty of health science centers who would also perform patient care functions. Area centers "in turn would provide assistance and counsel to community and neighborhood health care facilities, including the private practitioner."[3] Functions and processes of AHEC's would include:[4]

1. To maintain a community hospital of outstanding quality, many of whose patients would be admitted on a referral basis from smaller communities in the surrounding area.

2. To conduct educational programs under the supervision of the faculty of the university health science center with which the area center is affiliated.

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1. Higher Education and the Nation's Health: Policies for Medical and Dental Education. A Special Report and Recommendations by the Carnegie Commission on Higher Education, October, 1970. New York: McGraw-Hill Book Company. Copyright 1970 by the Carnegie Foundation for the Advancement of Teaching, p. 59.

2. Ibid., p. 47

3. Ibid., p. 56

4. Ibid., p. 57

3. To have these educational programs include:

   a. Residency programs
   b. Clinical instruction for M.D. candidates and D.D.S. candidates who would come there from the university health science center on a rotating basis
   c. Clinical experience for students in allied health programs
   d. Continuing education programs for health manpower in the area, conducted in cooperation with local professional associations

4. To provide guidance to comprehensive colleges and community colleges in the area in the development of training programs for allied health professions

5. To cooperate with hospitals and community agencies in the planning and development of more effective health care delivery systems

6. To conduct limited research programs concerned primarily with the evaluation of health care delivery systems.

Chairman Clark Kerr expressed the serious concern of the Commission for the need "to expand and restructure the education of professional health personnel."[5] Margaret S. Gordon, Associate Director of the Commission, pointed out "the major theme of the report was that changes in medical and dental education must be geared to critically needed changes in patterns of health care delivery."[6] The Continuing problem of uneven geographical distribution of health manpower weighs heavily on health planners at every level. Many observers have remarked frequently that medical school graduates tend to leave the area while those completing residencies tend to stay. AHEC's thus presented one practical solution to some of these distribution problems.

In a further recommendation, the Commission urged "construction grants for university health science centers and area health education centers in amounts up to 75% of total construction costs, with the remaining 25% available in the form of loans."[7] An AHEC might therefore involve building new educational or health care service facilities.

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5. Ibid., Foreword

6. Gordon, Margaret S. "The Carnegie Commission's Recommendations on Medical and Dental Education." Speech to the American Assembly "The Health of Americans," University of California, San Francisco, March 25 - 27, 1971

7. Ibid.

Regional Medical Programs offered a unique opportunity to stimulate the development of AHEC's because of their skill and experience in developing cooperative arrangements among individuals and groups concerned with health care. Using the regionalization process described in RMP Guidelines resulted in the development of new institutional arrangements by communities to meet health service needs for manpower. Now linked together are new combinations of community health planning agencies which define health service needs and manpower recruitment and education institutions and resources. As the RMP defined them, AHEC's are "new relationships between educational facilities where health care manpower is trained in the community settings where they practice."[8]

Carnegie Commission and RMP definitions of AHEC's are alike in that they emphasize problems of educational programs remote from patient needs; poor utilization of existing health manpower; inadequate numbers of certain health care professionals; and mal-distribution.

Those definitions differ in the organizational forms recommended. The Commission described satellites of universities under the control and supervision of medical school or other faculty. RMP described "independent community-based voluntary consortia of providers of health services and providers of education and training."[9] New non-profit corporations would serve as fiscal agents for distribution of federal, state, foundation or other funds to support recruitment and education programs for all levels of health manpower.

During the year following publication of the Carnegie Commission Report, the RMP outlined AHEC objectives as follows:[10]

1. To develop area health care manpower resources to meet community health service needs as defined by health planners. The AHEC should cooperate with health planners in anticipating future problems and in formulating alternative solutions.

2. To design education for health careers to become more responsive to the skills required by the health care delivery system.

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8. "Area Health Education Centers" Position Paper. Regional Medical Programs Service, Division of Professional and Technical Development, Discussion Draft, December 20, 1971. Introduction.

9. Ibid.

10. Ibid.

3. To provide basic and continuing education and training for health manpower that will include appropriate clinical experience. Emphasis should be placed on the provision of education and training in inter-disciplinary settings to increase the capacity to function as a member of a health team.

4. To improve the cost-effectiveness of education for health manpower by phasing out ineffective programs, eliminating duplicative efforts and increasing the efficiency of training programs.

5. To recruit and train local citizens in health occupations.

6. To support health education activities and programs for the general public.

7. To encourage consumer participation in the development of health career curricula, so that health training will elicit a sensitive response to patients' needs.

8. To identify problems for study in the areas of improving programs for continuing education and training.

9. To establish a professionally attractive environment which will promote retention of health manpower in communities which are currently underserved.

An intense planning effort took place in many locations during late 1971 - early 1972, including a series of decisions at the Federal level about funding support, primary responsibility, names, descriptions, et cetera. As a result of these decisions, the Bureau of Health Manpower Education awarded 11 contracts to Medical Schools for projects titled "Area Health Education Centers" while Regional Medical Programs Service awarded grants to 55 projects titled Health Services Educational Activities. As described by Rebecca Sadin, the projects differ in the following manner:

RMPS	BHME
NAME	
1. Health Services/Education Activities (HS/EA)	1. Area Health Education Centers (AHEC)
ADMINISTRATION	
2. Separate corporate entity or new institutional arrangement	2. Lead agency (medical school, school of osteopathy)
FUNDING	
3. By grant through local RMP	3. By contract with BHME central office

ROLE OF COMMUNITY

4. Active community participation in decision making. Collaborative effort emphasizing involvement and commitment of educational institutions, providers, planners and consumers as co-equal partners on a governing body.	4. "Passive" community role. Community organizations act as satellites of medical schools, which as lead agency obtains info and inputs, and is in control. It is a paper agreement between medical school and others in the community
5. Gives preference to, but doesn't limit, support to underserved areas.	5. Support limited to medically underserved areas.

ACTIVITIES

6. Training and employment of local citizens; development of health education activities for general public; development of opportunities for consumer inputs in development of health career opportunities; identification of problems for study in the areas of improving programs for continuing education and training; designing education to be more responsive to skills required by health delivery team.	6. Residency primary care; under-graduate clinical training; technical assistance to educational institutions to develop nursing and allied health training and to schools for pre-professional education.

CONSUMER INPUT

7. Essential both on Coordinating/ Governing Body and in development of curriculum.	7. No reference to consumer input or health education of the public.

SUPPORT

8. No basic training or stipend support except in new health occupations. No support for direct patient services.	8. Stipend and student support permissible. Also some support for direct services.

SIMILARITIES BETWEEN RMPS AND BHME

1. A region with common interests and common needs will work out a coordinated plan to evolve an educational system for health which takes maximum advantage of existing resources and talents and utilizes these resources to educate the needed manpower in the most appropriate settings.

2. There is a defined population and geographic area. Only one "AHEC" or organization for "HS/EA" per area.

3. Functions:
   a. Training and retraining of allied health personnel to meet needs.
   b. Continuing education to promote quality care.
   c. Introduction and support of health team appropriate to patient care.
   d. Programs and incentives for placement of health personnel in underserved areas.
   e. Maintain an attractive professional and educational environment to help to retain physicians and other personnel in deficit areas.
   f. Develop programs which encourage career mobility.
   g. Develop mechanisms for adequately financing and equitably distributiong costs of health manpower training.
   h. Include utilization of minorities and women.

Still another factor which recently developed was the decision by the Department of Internal Medicine and Surgery, U.S. Veterans Administration, to permit a different use of V.A. Hospitals as clinical training facilities. In the past, of course, some 90 V.A. facilities were participating with 89 medical schools as Dean's Committee hospitals. Although the V.A. is not able to award grants, some programmatic support was furnished to 8 locations for planning of the involvement of those hospitals with health manpower training. In some cases, the V.A. Hospital belongs to the arrangement of an AHEC, while others are members of HS/EA's. In no case is one of the 8 V.A. Hospitals acting alone in the role of health manpower education or training center.

The following pages present individual profiles of the 10 consortia that make up the California HS/EA Consortium Network. There is a map showing the 10 consortia service areas and the location of the 63 member educational institutions within them.

The wide diversity of cooperating institutions and corporation members demonstrates graphically the RMP intent to improve the health care delivery system by intervention at the manpower training level. California HS/EA's help "translate health care delivery priorities into manpower needs and the educational and training programs to meet those needs."[11] These projects

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11. Ibid., p. 5

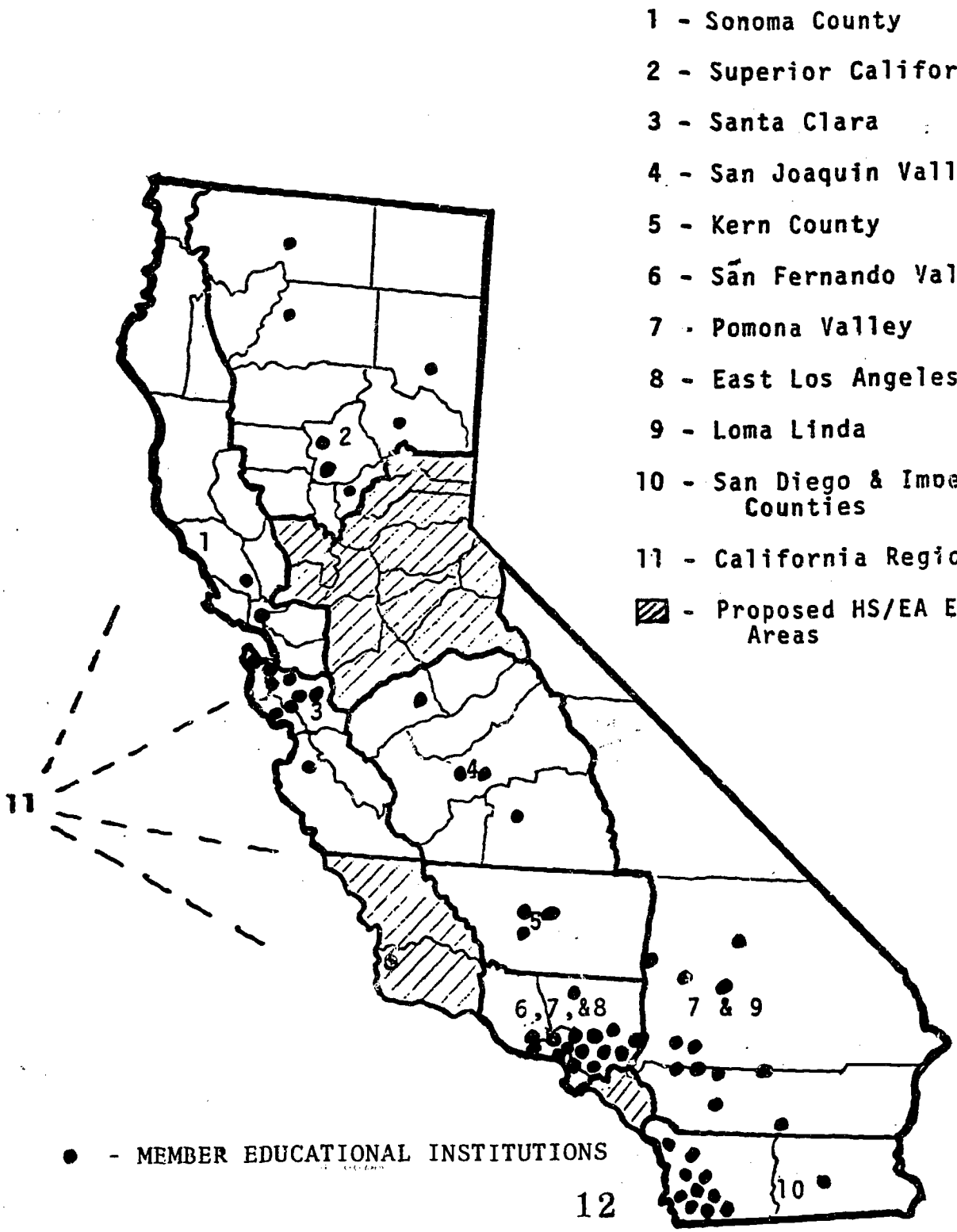
have not assumed responsibility for community or comprehensive health planning nor have they undertaken commitments to deliver direct health care services. Yet, the richness of their range of objectives clearly points out how they have maintained their responsiveness to local need and their community bases.

A face sheet introduces each consortia profile. It lists the director for the project, the consortium address, the service area population, and the member institutions. In certain service areas the consortia network is working with almost every clinical/service institution in the target area as liaison arrangement are established. On the face sheet, however, only those institutions are listed which are presently participating in a program component or are members of the consortium structure itself. Thus, the consortium potential and the institution membership over a period of time would be greater than the participants listed here. The profiles themselves provide information about the background of the service area, goals established for each consortium, and the current and planned activities which have emerged from the initial grant from the California RMP.

An analysis of the HS/EA profiles illustrates the common problems in many widely diverse areas of California. For example, Loma Linda, Santa Clara and San Diego all share the problem of channeling consortia effort and resources to respond to the very different needs of both impacted urban and isolated rural areas. Superior California and the Inyo-Mono County areas of the Loma Linda HS/EA must develop effective alternatives to physician manpower. East Los Angeles is emphasizing the specific needs of disadvantaged urban Chicano and Indian minorities; the Northeast Valley area of San Fernando Valley must respond to similar problems. Both need to modify a training system which is not responsive to the educational or financial status of their community if they are to effect positive change in the health care system within the community. Many HS/EA's have target populations where educational attainment is low (9.4 years in East Los Angeles, only 7th grade for the average farm worker). In such cases particular attention must be paid to retention even more than recruitment. Clearly, the problems are many, and the overall goal of a responsive educational-clinical training system is a complex one. If success is to be achieved, it will require integration of many approaches, including standardization of entry requirements, transfer agreement among institutions, pilot curricula, pilot career ladders, consumer education in the health care system, the health manpower training system and health planning, outreach continuing education, interdisciplinary approaches to health professional education, special scheduling and work study programs.

The California HS/EA Consortium Network directly involves 63 educational institutions: five of the seven campuses of the University of California; nine of the nineteen campuses in the State University system (formerly called State Colleges); 43 of the 120 community colleges; and six private schools. Activities undertaken within this Network have high potential for influencing other institutions and, ultimately, the entire higher education system for the State.

MAP OF
CALIFORNIA NETWORK OF HS/EA CONSORTIA



Project 1 - Sonoma County Health Services/Educational Activities

Service Area Population: 2,989,922

Director: John C. Wong, Ed.D.
Address: 2090 West Steele Lane
Santa Rosa, California
95402

MEMBER INSTITUTIONS

Educational Institutions

University of California - San Francisco
Santa Rosa Junior College, Santa Rosa
California State College, Sonoma

Clinical/Service Institutions

Redwood Empire Health Association
Santa Rosa Board of Supervisors
Sonoma County Foundation for Medical Care
Santa Rosa Senior Citizen Opportunity Service
Pharmaceutical Associations of Santa Rosa, Healdsburg, Sebastopol
North Bay Human Development Corporation
American Cancer Society
American Heart Association
Santa Rosa Hemophilian Association
Sonoma Comprehensive Health Planning
E.N.E.P., Santa Rosa
Sonoma County Mental Health Department
Santa Rosa Family Practice Center
Sebastopol Convalescent Hospital
Warrack Hospital
State Department of Mental Hygiene
Palm Drive Hospital
Gravenstein Convalescent Hospital
Easter Seals Association
Sonoma County Health Department
Santa Rosa Medical Social Service
Sonoma Community Hospital
Sonoma County Medical Association
Petaluma City Schools
Santa Rosa Department of Health Occupations
Santa Rosa Memorial Hospital
Sonoma County School District
Sonoma County Indian Health Project
People for Economic Opportunity, Santa Rosa
Santa Rosa Medical Auxiliary
Tuberculosis - Respiratory Disease Association of the Redwood Empire
Sonoma Nurses Association
Rincon Valley School District
Santa Rosa Public Health Nursing Association
Hillcrest Hospital
Cerebral Palsey Association
Brookwood Hospital
Bennett Valley School

Project 1 - Sonoma County Health Services/Educational Activities

I. BACKGROUND

The Sonoma County HS/EA, located in the town of Santa Rosa about 34 miles north of San Francisco, serves the primarily rural area of Sonoma County. As it develops, it is planned that it will also be able to serve as a training and coordinating resource for the other rural coastal counties in Northwestern California. Santa Rosa was identified as an ideal site for health manpower education by the Carnegie Commission Report on Medical Education (1970) because of the opportunities for clinical training within the town, the nearby location of state and junior colleges, and because of Santa Rosa's relative proximity to the specialized resources of San Francisco. Thus, Santa Rosa has the ability to train health workers in the community, and thus minimize the urban drain that occurs when Sonoma young people must go elsewhere for their training.

Characteristics of the Sonoma area to which the HS/EA is attempting to respond in order to fulfill its goal "of making health manpower education more relevant to the health care delivery system in the area" include 1) a sparse population scattered throughout a large area with only one urban center, 2) a population largely dependent upon the automobile and highway system for access to health services, 3) a fairly large minority of low-income, Spanish-speaking agricultural workers, 4) lack of consumers knowledgeable in health and preventive education as well as in the effective use of the health care system, 5) lack of adequate manpower data, 6) a planned HMO for Sonoma-Lake-Mendocino counties, which will increase the need for trained, available manpower as well as providing another service resource, 7) lack of core allied health curriculum for Santa Rosa Junior College and California State University - Sonoma (which would enhance lateral and vertical mobility), 8) Beginning of a linkage mechanism between UC/San Francisco Medical Center and Sonoma County (through which family practice residents are now trained in Sonoma County) which can be extended to include allied health education programs.

II. OVERALL OBJECTIVES

A. To improve and expand health manpower training and continuing education to meet identified needs (which will be determined by the project) of rural and semi-rural areas of Northwestern California.

B. To develop health education activities for the general public and encourage informed consumer participation in community health affairs.

C. To develop a climate and structure for linking health manpower training to health care services and community health planning activities.

III. CURRENT AND PROJECTED ACTIVITIES

A. Allied Health Education: Develop a core curriculum for allied health personnel in the local colleges, differentiated curricula for the various fields of training, and coordinate and augment suitable field placements and opportunities for clinical service.

1. Survey of working professionals to compile task analysis of functions of health professionals in practice, including ranking as to frequency and importance of tasks.

2. Analysis of basic science components of allied health programs at Santa Rosa Junior College and California State University - Sonoma.

3. Joint effort with California State University - Sonoma to augment continuing education in laboratory health science and begin development of a comprehensive program.

4. Develop and implement plans for traineeship in medical laboratory technology at Sonoma State Hospital.

5. Work with hospital in-service educators to coordinate in-service training throughout Sonoma County.

6. Collect and analyze consumer feedback on allied health personnel performance of tasks in a clinical facility. Correlate in design of allied health curriculum.

7. Continue ongoing data collection and analysis of health manpower needs for Sonoma County.

8. Establish medical library field placement at Sonoma County Hospital for library science students.

9. Development of curriculum for special track in health professional counselling (graduate program in counselling, California State University - Sonoma). This program is now beginning development of a grant to acquire additional grant monies to enable the implementation of the pilot curriculum.

10. Continue planning for a Consortium of Health Educational Institutions in Northern California, including junior colleges, state colleges and universities, hospital schools, proprietary schools, etc., for the purpose of coordinating development of pre-professional, professional and postgraduate health education.

B. Consumer Education: To help prepare consumers to recognize and solve health problems of self, family and community.

1. Organize and implement a program of minority recruitment into health field, including a focus on possible problems of retention with proposed solutions, for those recruited.

2. Formation of a Common Health Club for the training of knowledgeable consumers needed to implement consumer health activities as well as to provide a forum for consumer education. There are 1000 members thus far.

3. Coordination with other agencies (such as voluntary health agencies) involved in consumer education and with educational institutions who may provide consumer programs.

4. Development of a resource center for consumer health education.

5. Joint preparation of consumer education grant with American Cancer Society.

C. Family Practice Education: Continue development of Sonoma County Community Hospital - University of California, San Francisco Medical Center cooperative training and demonstration program in family care.

1. Residencies and medical student clerkships are available in Family Practice, through a joint program of the two institutions.

2. Operation of a demonstration outreach clinic for Spanish-speaking agricultural workers in Healdsburg, California.

3. Team approach to Family Practice includes a family health worker training program at the Healdsburg Clinic.

D. Nursing Education: To define educational requirements at various professional levels of nursing education to make best use of teaching and clinical resources: to identify and/or develop field placement opportunities for clinical experience within the county.

1. Establishment of a nursing consortium which represents all levels of institutional care, all educational levels of nurses (aide, LVN, RN B.A., M.S., etc.), all nursing specialties, and all aspects of patient care needs (prevention, maintenance, screening, intensive rehabilitative, etc.).

2. Participation in the Task Analysis Process Plan, and its component activities.

3. Selection of site (clinical) for patient need profiles and participation in that data collection and analysis.

E. Patient Care Audit: To develop a group of audit teams at health care institutions in the county, linked to a community-wide "Patient Care Study Council."

1. Development of patient need profiles to begin an audit process which uses the evaluative process as the tool for directing continuing education. Selection of audit sites.

2. Train health professionals to function with consumers to implement the patient care audit process in a variety of clinical settings (hospitals, doctors' offices, clinics, etc.) throughout the county.

IV. FIRST YEAR CRMP FUNDING: $437,236

Project 2 - Superior California Health Manpower Council

Service Area Population: 400,274

Director: W. Taylor Lee
Address: Center for Continuing Education
California State University, Chico
Chico, California 95926

MEMBER INSTITUTIONS

Educational Institutions

California State University - Chico
Butte College, Durham
Feather River College, Quincy
Lassen College, Susanville
Shasta College, Redding
College of the Siskiyous, Weed City
Yuba College, Marysville

Clinical/Service Institutions

Plumas County Hospital
N. T. Enloe Memorial Hospital
Mercy Hospital, Redding
Superior California Comprehensive Health Planning
Colusa County Migrant Housing
California Nurses Association
California Association of Health Facilities
Delamere Hospitals Incorporated
California Heart Association
Tuberculosis and Health Association
Butte County Hospital
Medical Societies of the 12 Superior California Counties
California Licensed Vocational Nurses Association
Dental Societies of the 12 Superior California Counties

Project 2 - Superior California Health Manpower Council

I. BACKGROUND

The area served by the Superior California HS/EA includes the twelve Northeastern counties of California. The population is 400,274 -- about 2% of the population of the State. Of this number, around 81% live in the upper Sacramento Valley and the remaining 19% are scattered throughout the isolated mountainous regions of the Sierra -- perhaps even completely shut off during the winter months. Around 50% of the population of the Superior California area live in small to medium-sized villages and towns, the other half are scattered throughout the rural areas.

Minority groups in this population are primarily Indians, Blacks and Chicanos. Indians constitute 1.5% of the overall population, but may represent perhaps 80 - 100% of the population in selected areas. And, as with any agricultural region in California, there is a sizeable number of Spanish-speaking agricultural and migrant workers. Generally, in the HS/EA service area the average educational attainment of the residents is lower than the State average: 45% of the population have completed four years of high school (compared to 51.5% for the State) and only 6.8% have completed four years of college (compared to 11.8% for the State). Thus, an educational network will be of great benefit to the area.

This section of California has always experienced difficulty in recruiting sufficient health manpower to meet its needs, and it is expected that this trend will continue, particularly in the area of physician manpower. This results from the fact that there is no medical school in the service area (UC Davis is the closest such institution, outside of Sacramento about 12 miles). Consequently, doctors do not have access to the consultative and specialized resources of a major health sciences center; furthermore, a physician's own needs for continuing education can be met only with difficulty and there is the ongoing problem of professional isolation. Through the CRMP program at Davis, continuing education programs have been extended to 68 sites in Superior California. Even though the future of CRMP is in doubt, this network remains. Dean John Tupper of UC Davis has reaffirmed that Davis School of Medicine must be "a school without walls," which does serve as a resource for this isolated area. This has been and will continue to be an important factor in the stimulation and coordination of health professional education in Superior California. However, for this section of California to provide adequate health care for its residents, it must rely very strongly on allied health personnel and an innovative system of health care delivery. Not only is there a shortage of MD's in the area, but also there are no major teaching hospitals and no intern or residency programs, thus eliminating another important source of health manpower.

Within the target area there are 32 general hospitals, ranging in size from

10 to 164 beds. In addition, there are 31 convalescent hospitals and 108 residential care facilities. Residential care facilities are licensed by the County Welfare Department if under 14 beds. If larger than 14 beds, they are licensed by the California State Department of Social Welfare. However, it should be noted that none of these facilities offers nursing services. The hospitals have emerged in a random pattern, often isolated from one another, and perhaps even from a section of the population they are expected to serve (as in the mountain regions). Thus, the population of Superior California must depend upon the automobile and the highway system to obtain access to health care. Often this involves driving long distances, and in winter many of these roads are at times impassable.

To respond to the needs of the health care system in this large (33,000 square miles) rural area, the HS/EA has built upon a voluntary association, the Northern California Area Council for Health Education, which includes the six community colleges in Superior California and the State University of California at Chico. Presently these seven institutions offer 15 allied health education programs; eight additional programs are projected for two of the more isolated colleges, Siskiyou and Feather River (the latter currently offers no health programs). Thirteen hospitals are currently cooperating with four of the colleges (Chico, Yuba, Butte, Shasta) to provide clinical training and field placements for 20 programs. Over 600 students participate in these placements.

The Consortium office is located at California State University - Chico, which is both centrally located geographically as well as serving as a "senior partner" to the six community colleges. Because of the isolation which follows from a small population scattered over a large area, Superior California recognizes that problems must be solved cooperatively:

> "A single political community cannot resolve its own health problems. It may be able to work them out...by joint action by several jurisdictions. Contracts and agreements among the various political communities will help speed solution of immediate problems and provide a method to anticipate the future."
>
> (Area II California Regional Medical Programs Application for a Cooperative HS/EA for Superior California, p. 1. May, 1971)

In addition, it is recognized that the health needs of the area must be met through the mechanism of more efficient and responsive health manpower training. In its landmark planning document, "Health Plan for the 70's," the Comprehensive Health Planning Association of Superior California recognized this need:

> "Every effort should be made by the community colleges, Chico State College now California State University - Chico, and other clinical facilities in Superior California to develop an area health education

network. The primary purposes of the area health education network should be to rationalize the system for training health manpower. There is need to minimize duplications and fill gaps in the existing health manpower training programs. Recruitment of students from Superior California into training programs is a potentially useful step for combatting the maldistribution of health care services. Further research needs to be conducted into the [illegible]us of health manpower which can develop into [illegible]earinghouse function."

(Health Plan for the 70's, p. 12, Superior California Comprehensive Health Planning Association, 1972)

The Superior California HS/EA has responded directly to this mandate through the avenue of a cooperative community consortium.

II. OVERALL OBJECTIVES

To develop a community consortium of educational and clinical institutions, planning agencies, health professional societies and minority representatives which will be able to function as a clearinghouse for health manpower needs in Superior California.

III. CURRENT AND PROJECTED ACTIVITIES

A. Superior California Health Manpower Council: The manpower council, an expansion of the Area Council of Health Education to include health professional organizations, clinical facilities, Comprehensive Health Planning, and minority representatives, has been incorporated. Overall coordination of area allied health personnel programs and manpower needs is provided through this mechanism.

B. Consumer Education: Develop health education programs for the general public to enable them to take informed responsibility for their own health and that of their family and community.

C. Manpower Training Programs: These activities are the beginning of a comprehensive clearinghouse which will coordinate the demand for health manpower in Superior California with the trained manpower pool and the programs which supply these health personnel.

1. A committee is studying the feasibility of articulation between area Licensed Vocational Nurse Associate programs and baccalaureate nursing programs. This principle of optimizing upward and lateral mobility for a given class of professions will then be applied to other programs.

2. Development of a dental hygiene training program (found to be a top priority need through CHP studies) for the area educational

institutions has begun.

3. A compre[illegible] information bank on [illegible] continuing education activit[illegible] Superior California i[illegible] g established. A quarterly [illegible] will be distributed to all health professionals.

4. Development of another needed allied health program, the Emergency Medical Technician is beginning, and will be coordinated with a CHP-CRMP project which is currently developing an emergency medical care plan for the Superior California area.

IV. FIRST YEAR CRMP FUNDING: $50,000

Project 3 - Health Services Education Council (Santa Clara)

Service Area Population: 2,013,035

Director: Stanley Parry
Address: 4300 Stevens Creek Boulevard
Suite 225
San Jose, California 95129

MEMBER INSTITUTIONS

Educational Institutions

Stanford University, Palo Alto
California State University - San Jose
West Valley College, Campbell
Foothill College, Los Altos
De Anza College, Cupertino
San Jose City College, San Jose
Andon Medical and Dental Nursing College - San Jose
Hartnell College, Salinas

Clinical/Service Institutions

Mid-Coast Comprehensive Health Planning Association
San Mateo County Comprehensive Health Planning Association
Santa Clara County Comprehensive Health Planning Association
Santa Clara Valley Medical Center, San Jose
California Association of Nursing Homes
Santa Clara County Health Department
Wheeler Hospital, Gilroy
San Jose Hospital, San Jose
King City Neighborhood Health Center
Foundation for Research and Community Development, San Jose
Catholic Social Service
Health Services Education Council, San Jose
Santa Clara County Health Department, San Jose
Dental Societies of San Mateo, Santa Clara, Santa Cruz, San Benito, and Monterey Counties
Medical Societies of San Mateo, Santa Clara, Santa Cruz, San Benito, and Monterey Counties
Nurses Association of San Mateo, Santa Clara, Santa Cruz, San Benito, and Monterey Counties
Julia Sanitarium
San Mateo Unified School District
San Jose Unified School District
San Benito Unified School District

Project 3 - Health Services Education Council (Santa Clara)

I. BACKGROUND

The area served by the Santa Clara HS/EA, located in the San Jose Metropolitan Area, population 1,995,858, includes both the highly urbanized counties of San Mateo (San Francisco Peninsula) and Santa Clara, as well as the isolated rural sections found in the bay shore, coastal mountain and river valley areas of Santa Cruz, San Benito, and Monterey Counties. The extremes of this HS/EA service region place different demands on on the health care delivery system and therefore its training activities; however, in all underserved communities, whether rural or urban, there is a common need for educational programs that are responsive to consumers and the community. Specific program components may vary, but, there must be especial coordination of effort among educational and clinical/service institutions to insure that all needed programs are provided, as well as that there is no unnecessary duplication of effort.

The highly urban counties of Santa Clara and Santa Cruz are among the fastest growing counties in the State of California. (It is projected that Santa Clara County will soon house 25% of the 11-county San Francisco Bay Area population of 4,578,2430.) In these counties, per capita income is above the State average; however, poverty pockets exist where there are substantial numbers of disadvantaged, primarily Chicanos and Blacks. Although the numbers of MD's and RN's are generally adequate (allied health professions will be discussed later), there is a need for mechanisms to focus services and manpower into these pockets. These mechanisms have traditionally been service activities; for example the OEO Neighborhood Health Centers; however, training programs must also encourage health professionals at all levels to practice in urban and rural scarcity areas.

Santa Cruz, San Benito and Monterey Counties present a more obvious index of health care problems than their urban neighbors. The area is an agricultural one; consumers are generally dependent on the highway and automobile for health care access and may live and work a considerable distance from available care. In San Benito and Santa Cruz Counties the death rate is above the State average (as determined by both the State Department of Public Health statistics as well as the CRMP-sponsored Hospital Discharge Study, April, 1971). Furthermore, although the number of physicians in Monterey and Santa Cruz Counties is only slightly below the State average -- San Benito falls far below--the percentage of physicians in all 3 of these counties above the age of 70 is extremely high. For example, in San Benito County, there is not a single practicing physician under 40 years of age, and the county also falls well below the State average for dentists. In San Benito and Monterey Counties registered nurses are significantly below

the recommended nurse-population ratio in San Benito and Monterey Counties; all five counties are below the recommended level for LVN's and inhalation therapists. Thus, coordination and stimulation of allied health education in the Santa Clara HS/EA service area is clearly needed. (Eleven community colleges, one state college and Stanford Medical Center offer a total of 34 allied health training programs.) Certain of the counties have population groups with special problems: Santa Cruz and San Benito have a large proportion of the elderly; Santa Clara and San Benito have a high proportion of children under 14, although it is Monterey County which has an infant and fetal death rate above the State average. The three rural counties have a large minority population of Spanish-speaking agricultural workers.

Thus, in addition to encouraging a more efficient distribution of health manpower to serve scarcity areas, HS/EA programs must respond to the special needs of the groups mentioned, and provide the coordination to avoid duplication, yet make available needed programs in perhaps previously unserved areas.

II. OVERALL OBJECTIVES

Once established and incorporated, the HS/EA will develop a health manpower data system which, by identifying specific local health manpower needs and resources, will

1. increase the placement and retention of health personnel in scarcity areas

2. facilitate mobility of health workers in general

3. improve the efficiency and responsiveness of manpower training with regard to local needs and trends.

III. CURRENT AND PROJECTED ACTIVITIES

A. Health Services Education Council: The Council was incorporated in December, 1972, and employs three professional staff. The administration-program management of the HS/EA activities includes future funding, public information, new proposals, health manpower data, clinical coordination, a recruitment and counselling program for minorities, and coordination of continuing education.

B. Manpower Coordination and Collection of Data: This component is to gather and maintain ongoing data on the trained health manpower pool.

1. Design of a systems model for data collection which includes the three Comprehensive Health Planning Agencies in the service area, and agreements with other agencies (CHP, State and local educational institutions, etc.).

2. Survey of educational institutions and the establishment of a coordinating committee for the use of clinical facilities by training institutions.

3. Counselling and recruitment program for both students and consumers re: health manpower opportunities (including minority recruitment). A career resource book for counselors and students has been developed as well as health career seminars, and workshops for counselors.

C. Community Health Worker Program:

1. A joint effort by the Consortium, CHP, local providers and consumers in San Benito County is focused toward developing an ambulatory care center.

2. Concurrently, a community health worker training program is being finalized for this area; the planned ambulatory care center (associated with Trabajadores Adelante,an OEO-funded activity in Gilroy, California) will be the base facility for the community health worker program.

3. Technical assistance is being provided to the efforts of the Gilroy hospital and community to establish a prepaid health plan.

D. Primary Care Physician Program:

1. Assess the tasks, skills, and functions of the primary care physician.

2. A proposed residency program, planned for the King City community in Monterey County, is being expanded to include other programs in Monterey County in a coordinated approach (interdisciplinary) to the area of primary care.

E. Licenses, Credentials and Accreditation: In a coordinated effort with the San Fernando Valley HS/EA Consortium, data on licensing of health manpower and accreditation of health personnel has been collected in the Santa Clara service area.

F. Allied Health Education Curricula:

1. Continue to assist California State University - San Jose, in a health project designed to coordinate the 18 health-related departments of this major university, including consolidation of some programs and components.

2. Develop the California State University - San Jose allied health health curriculum coordination as a model for other schools.

IV. FIRST YEAR CRMP FUNDING $170,265

Project 4 - San Joaquin Valley Health Consortium, Inc.

Service Area Population: 697,232

Director: James Ricketts
Address: 3381 N. Bond Street
Fresno, California 93726

MEMBER INSTITUTIONS

Educational Institutions

California State University - Fresno
Fresno City College, Fresno
Merced College, Merced
College of the Sequoias, Visalia

Clinical/Service Institutions

St. Agnes Hospital
Valley Medical Center
Fresno Model Cities
Fresno County Welfare Department
Fresno Department of Mental Health
West Hills College
Kings View Hospital
Hacienda Convalescent Hospital
Veterans Administration Hospital, Fresno
AMA Council on Rural Health (Fresno)
KFSN (Fresno)

Project 4 - San Joaquin Valley Health Consortium, Inc.

I. BACKGROUND

The San Joaquin Valley, 250 miles long and extending about 40-60 miles between the Sierras and the Coastal range, is an important agricultural area of California. This "single industry" emphasis, particularly with the variable and uncertain nature of farming, has resulted in several problems for the Valley. There is a very large Chicano population (26%), including migrant workers. The tremendous influx of workers during the growing season places a great strain on the health care and other service resources of the area. Additionally, off-season unemployment rates of 25-30% are not uncommon. Statistics from the State of California indicate that the averages of families receiving some form of welfare assistance in the counties served by the San Joaquin Valley HS/EA are between 5 and 8% above the state average. The special health requirements of the area also include geographical isolation and a lack of public transportation. People are dependent on the automobile to obtain health care and must often drive long distances, usually losing time from work to do so since there are few health services available during evening hours. For example, a resident of outlying Fresno County must make a 100-120 mile round trip to obtain medical care in Fresno. If he is dependent on county assistance, the trip is mandatory since the county hospital is located there. Clearly better distribution of services must be encouraged.

Fresno, located centrally in the San Joaquin Valley, is the major urban center of the region with a population of 413,053. It has been recommended as a site for a new medical school in California, since access to the specialized resources of major teaching and research facilities must currently be obtained from the Bay Area (Stanford, San Francisco) or Los Angeles. Planning for the medical school continues and will be coordinated with HS/EA plans. Fresno has several large, well-established clinical facilities which do offer many specialized services and trained manpower themselves, and also have existing affiliation agreements with Stanford, University of California - San Francisco Medical Center, and the University of Southern California. The clinical facilities necessary for successful health manpower training are thus available through existing cooperative arrangements and affiliation agreements.

California State University - Fresno, serves as the major educational institution for the 11 community colleges in the San Joaquin area which articulate with its program. The state university serves as the focal point for health training in the area and has developed a wide variety of allied health programs. Nevertheless, an on-going consortium mechanism is needed to insure the most efficient use of resources, both educational and clinical. With the development of a coordinated health training program, one of the focuses will be to develop an outreach program for the underserved outlying rural areas, which often provide only basic services, as well as having a shortage of manpower.

II. OVERALL OBJECTIVES

A. To provide a coordinated effort to train and educate the appropriate numbers and kinds of health personnel required to assure high quality health care to area residents.

B. Educational programs will be designed to maximize the individual and collective competencies of participating institutions.

III. CURRENT AND PROJECTED ACTIVITIES

A. Organization: The HS/EA consortium has been incorporated.

B. Health Manpower Data:

1. Survey hospitals and service institutions to assess the supply and demand of health manpower.

2. Establish job performance criteria.

3. Inventory existing training and continuing education programs and begin development of a comprehensive and coordinated plan in this area.

4. Develop instruments for identifying and analyzing governmental, legislative, academic barriers (etc.) which impede the most effective utilization of allied health personnel, job mobility, recruitment and employability.

C. Consumer Education: Identify on-going community health education programs and activities for future cooperation and interface.

IV. FIRST YEAR CRMP FUNDING: $58,031

Project 5 - Kern County Health Services/Educational Activities

Service Area Population: 350,000

Director: Glen Meredith
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9001 Stockdale Highway
Bakersfield, California 90309

MEMBER INSTITUTIONS

Educational Institutions

California State University - Bakersfield
Bakersfield College, Bakersfield
Kern High School District
Kern Community College District

Clinical/Service Institutions

Kern County Dental Society
Mercy Hospital
Kern County Public Health Department
Kern County Association of Medical
Laboratory Technologists
Kern County Comprehensive Health
Planning

Project 5 - Kern County Health Services/Educational Activities

I. BACKGROUND

The Kern County HS/EA serves a population of about 350,000 with about half of these concentrated in the Bakersfield area. It is a predominantly agricultural area with a large migrant and farm worker population. California State University - Bakersfield is the only four-year health manpower training facility within 100 miles and the university was only established in 1970. However, the university has stated that health manpower training will be a major focus of its curriculum, and that it recognizes the importance of cooperative agreements with community colleges to improve articulation.

It is often easier to structure a developing program effectively than it is to revise an established one which is no longer appropriate for changing conditions. California State University - Bakersfield has already instituted a number of curricular innovations designed to facilitate students moving at their own pace, including self-instructional modules, exam placement, etc. One focus of the HS/EA will be to develop such individualized programs in the health field. Bakersfield College, which is the largest community college in the area, has a strong record in allied health programs and is currently exploring means of articulating its programs with those of the state university.

In the Bakersfield area the community colleges and the hospitals offer several allied health training programs. Additionally, health professional associations, medical societies, and community agencies offer a number of continuing education programs. However, there has been little coordination among these programs and almost no effort to link education with service needs. Also, without a four-year college in the area, little has been done to approach the problem of articulation, particularly for upward mobility. The HS/EA will bring the organizations and institutions involved in these problems and their solutions together, establishing the Consortium as the coordinating mechanism.

II. OVERALL OBJECTIVES

To form a cooperative committee which links the community, health care providers and institutions, service agencies, and educational and training institutions to plan the implementation of a coordinated program for the education and training of health manpower in Kern County.

III. CURRENT AND PROJECTED ACTIVITIES

A. HS/EA Consortium: Expansion of the HS/EA Planning Committee to a comprehensive education-service-community consortium.

B. Data Collection and Inventory:

1. Survey health manpower and service resources.

2. Survey existing health manpower training programs.

C. Program Planning:

1. Project health manpower needs of the area from all data developed as well as relevant CHP studies.

2. Provide recommendations and priorities for needed training programs.

3. Recommend the roles of the principal agencies and institutions in future manpower production.

4. Stimulate the development of common core curricula and the mechanisms for the transfer of credit between programs.

5. Provide the forum for needed expertise from consultants in a wide variety of health manpower training programs to assist existing programs as well as new ones.

6. Develop a plan for cooperative educational action, including an estimate of required resources.

7. Define the necessary resources and organizations to meet the needs of remote rural areas and minority and migrant groups. Develop plans for recruiting members of these target groups as health providers.

IV. FIRST YEAR CRMP FUNDING: $50,000

Project 6 - San Fernando Valley Extended Care Health Consortium, Inc.

Service Area Population: 1,722,008

Director: George Holland, Ph.D.
Address: 10401 Balboa Boulevard
Suite 520
Granada Hills, California
91344

MEMBER INSTITUTIONS

Educational Institutions

California State University - Northridge
Los Angeles Valley Junior College, Los Angeles
Santa Monica City College Santa Monica
University of California - Los Angeles
Los Angeles Pierce Community College, Los Angeles
College of the Canyons, Valencia
Antelope Valley Junior College, Lancaster
Casa Loma College, Pacoima
Ventura Junior College, Ventura

Clinical/Services Institutions

Canoga Park Hospital
Glendale Adventist Hospital
Granada Hills Community Hospital
Holy Cross Hospital
Kaiser Foundation Hospital (Panorama City)
Lancaster Community Hospital
Olive View Medical Center
Glendale Memorial Hospital
Panorama City Memorial Hospital
Northridge Hospital
Memorial Lutheran Hospital, Pacoima
St. Joseph Hospital Medical Center, Burbank
Valley Presbyterian Hospital, Van Nuys
Veterans Administration Hospital
West Hills Hospital
West Valley Community Hospital
Northeast Valley Health Corporation
Van Nuys Welfare Planning Council
Dubnoff School for Educational Therapy, North Hollywood
El Proyecto Del Barrio
San Fernando Valley Child Guidance Clinic, Van Nuys
West Valley District Community Health Services, Canoga Park
Arizona Convalescent Hospital, Santa Monica
Beverly Manor Convalescent Hospitals (Van Nuys, Burbank)
Beverly Manor Sanitarium, Burbank
Canoga Terrace Convalescent Hospital, Canoga Park
Golden State Manor
Jefferson Convalescent Hospital
Newhall Nursing Home, Incorporated
Reseda Convalescent Hospital
Riverside Convalescent Hospital
Sherman Oaks Convalescent Hospital
Sherman Oaks Convalescent Hospital
Spa Convalescent Hospital
Topanga Park Convalescent Hospital
Valley Palms Convalescent Hospital
Van Nuys Psychiatric Hospital
American Cancer Society, Reseda
American Red Cross
Encino Community Speech and Hearing Center
Los Angeles County Department of Community Health Services, Los Angeles
Tierra del Sol, Sunland
West Valley Center for Educational Therapy, Encino

Project 6 - San Fernando Valley Extended Care Health Consortium, Inc.

I. BACKGROUND

The San Fernando Valley is a sprawling, suburban area which includes portions of the incorporated area of the City of Los Angeles, numerous small-to-large separately incorporated suburban cities, and unincorporated areas. The total population is about 1,722,000. The Northeast section of the Valley, with a population of 250,000, is a large, low-income area where 30-40% of the families have annual incomes under $8,000. Ethnic distribution indicates a Chicano population of 20% and a Black population of 10%. Unemployment rates are 17% overall (higher for Chicanos and Blacks), compared with 7.5% for all of Los Angeles County. In this section there are extreme shortages of health manpower. For example, a survey of physicians showed that the average physician in this area could expect to see 171 patients per week. In a household survey of three communities within the Northeast Valley, 10% indicated that they have no transportation to medical facilities and that health services are often not available during evening hours. Thirty-four percent indicated that they had no health insurance.

The percentage of residents employed in health fields in this area is high (1 in 16) compared to the national average of 1 in 26. However, most workers are trapped in low-level positions; there is little upward mobility. An important focus of the HS/EA in responding to the needs of the Northeast Valley will be to develop the kinds of programs which would foster upward mobility for the disadvantaged.

There is no university health science center within the San Fernando Valley, although both UCLA and USC may be reached in an hour's drive by freeway. There are 8 major hospitals, 40 smaller hospitals, and 80 extended care facilities within the Valley. There has been very little coordination between the health care providers and the educational institutions responsible for training, retraining and continuing education. This absence of a cohesive plan minimizes the effectiveness of area resources; it also has resulted in very haphazard hiring. There is no registry for health manpower needs in the San Fernando Valley, and it is difficult for persons seeking jobs to locate positions or to know what sort of retraining would enable them to find work.

Among the educational and clinical training institutions, entry level requirements vary as well as academic credit allowed for training completed. Articulation among institutions is difficult, and there is little effort to promote upward or lateral mobility. A function of the HS/EA will be to project future health care needs for the San Fernando Valley, and, through a coordinated plan, maximize the available educational and clinical resources to meet these needs.

As with other urban areas, San Fernando Valley appears to face a potential lack of needed health care services if the present delivery

system remains the same. Consequently, an apparent direction or strategy for the HS/EA would be to redefine the function of allied health personnel within the context of a health team system.

II. OVERALL OBJECTIVES

To organize and coordinate existing and innovative health manpower training programs within consortium institutions so as to further upward and lateral mobility.

III. CURRENT AND PROJECTED ACTIVITIES

A. Health Manpower Data:

1. Establish an on-going inventory of existing clinical and educational resources

2. Examine existing manpower needs and establish a manpower registry to be used as the basis for modifying existing training programs and for establishing program priorities for future planning.

3. Coordinate institutional research for the utilization of existing health manpower.

B. Program Planning:

1. Survey health manpower interdisciplinary and core curricula models and evaluate existing core programs to establish a basis for developing pilot demonstration training programs.

2. Analyze performance criteria for specific allied health personnel in order to implement relevant curricula and establish career ladders.

3. Analyze barriers in development and utilization of allied health professions to begin planning methods for minimizing them.

IV. FIRST YEAR CRMP FUNDING: $179,917

Project 7 - Pomona Valley Health Services/Educational Activities

Service Area Population: 1,000,000

Director: Bruce A. Murray
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Claremont Graduate School
Harper Hall, Room 30
Claremont, California 91711

MEMBER INSTITUTIONS

Educational Institutions

California State Polytechnic University, Pomona
Mt. San Antonio Community College Walnut
Chaffey Community College, Alta Loma
Claremont Colleges, Claremont

Clinical/Service Institutions

Pomona Area Health Council
South Hills Neighborhood Service Center
Pomona Community Hospital
Opinion Research of Califoria
Casa Colina Hospital
Los Angeles Department of Health Services
Los Angeles Department of Human Resources Development
Southern California Permanente Medical Group

Project 7 - Pomona Valley Health Services/Educational Activities

I. BACKGROUND

The Pomona Valley area, which lies between the metropolitan centers of Los Angeles and Riverside, is a rapidly changing community from both the standpoint of population numbers and the make-up of that population. For example, in the city of Pomona, the population increased from 67,000 to 87,000 between 1960 and 1970; 50% of the population increase (10,000) was Black. Similar trends are true for this whole urban area. Black and Chicano percentages of the population are increasing rapidly and are projected to equal 50% of the total population by the end of the decade. Many of these in-migrating workers have a lower skill level as a result of their disadvantaged background and are experiencing difficulty finding work under present economic conditions. There are currently 27,000 households in Pomona, 15% with an income of less than $3,000. The health service industry is the third largest in the nation; coordination of training with job needs and opportunities will thus not only improve the health status of the disadvantaged in the Pomona area, but will be a method of improving employment and economic opportunities as well.

Particularly because of the present and projected population breakdown of the Pomona area, special attention will be paid to the needs and concerns of minority groups in the Pomona Valley HS/EA. The consortium and the activities which it will coordinate are being developed jointly with the Health Service/Education Activity which centers in Loma Linda, California, and also serves the referral area located between Riverside and Los Angeles. The Pomona Valley HS/EA will focus on consumer attitudes in the area; Loma Linda will have chief responsibility for the collection and analysis of health manpower data.

Accessibility to services is a problem for the poverty residents of the Pomona Valley. The nearest county hospital is 35 miles away and public transportation is virtually non-existent. In recognition of this problem, the California State Department of Health Care Services has established a prepaid capitation contract for Medi-Cal beneficiaries in the Pomona Valley. This has great potential impact on the health manpower situation in the area since prepaid health services, with their limit on funds, encourage the use of allied health personnel and innovative staffing patterns. Furthermore, to begin to approach the problem of coordination of health care needs and resources within the area, again with particular attention focused on the needs of the low-income community, a Liaison Committee has been formed among the Mexican-American Opportunity Foundation, Casa Colina Hospital, and the Pomona Valley Hospital.

Other problems which the area faces include an excess of hospital beds, but a lack of clinical training facilities--an aspect of coordinated planning with which the HS/EA structure is designed to deal. There is a need to attract doctors to the area. One of the main disadvantages which present providers have noted is the lack of continuing education

programs. Also, there is generally poor dialogue between providers and consumers, and thus a real need for an open forum approach through which these two groups will be able to understand each other's viewpoint and thus approach health problems in a constructive manner. The Claremont Colleges, the sponsor of the HS/EA activity, are also conducting a feasibility study to determine whether a medical school should be established in the area.

II. OVERALL OBJECTIVES

A. To analyze local health care needs, focusing on consumer attitudes toward service, and disseminate information on local manpower supply and resources to area health manpower trainers and employers.

B. To propose a structure for a public non-profit corporation, with a representative Board of Directors to coordinate the effective training and utilization of health manpower.

III. CURRENT AND PROJECTED ACTIVITIES

A. HS/EA Structure and Function:

1. The major functions of an HS/EA have been identified, and, on the basis of these functions, a structure for a corporation has been developed.

2. A process for on-going data collection and utilization for health manpower needs have been completed and projections based on current data have been compiled.

3. Agreements have been obtained for institutional cooperation in curriculum planning.

B. Consumer Participation:

1. In the course of development of the HS/EA structure, eighteen meetings were held with different consumer groups and segments of the community. Even more valuable than the specific recommendations for HS/EA structure and activities was the process that this established. For the first time providers and consumers were able to establish a channel of communication concerning their perceptions of health care needs and priorities.

2. An overall plan for health manpower development in the area has been developed with input from community consumer groups, health care providers, educators and local government officials.

IV. FIRST YEAR CRMP FUNDING: $45,370

Project 8 - East Los Angeles Health Manpower Consortium, Inc.

Service Area Population: 600,000

Director: John Serrano
Address : East Los Angeles College
Department of Life Sciences
5357 East Brooklyn
Los Angeles, California 90022

MEMBER INSTITUTIONS

Educational Institutions

California State University - Los Angeles
University of California - Los Angeles
East Los Angeles College
University of Southern California, Los Angeles

Clinical/Service Institutions

Beverly Hospital
East Los Angeles Child & Youth Clinic
Los Angeles County Health Department
American Indian Free Clinic
East Los Angeles Regional Occupational Clinic
Los Angeles County Department of Health Services
Barrio Industries
LAC/USC Medical Center, Los Angeles
Sycamore Park Convalescent Hospital
White Memorial Medical Center
Los Angeles County Community Health Services, Los Angeles
Los Angeles City Board of Education, Los Angeles
Montebello Unified School District, Montebello
National Medical Association Foundation, Los Angeles
E.L.A. Health Task Force, Los Angeles
Bella Vista Community Hospital, Los Angeles
Los Angeles City Library, Los Angeles
E.L.A. Doctors Hospital, Los Angeles
Campus-Community Involvement Center, Los Angeles
L.A. Model Cities, Los Angeles
Community & Human Resources Agency, Los Angeles
Monterey Residence-Boy's Home, Los Angeles
Martin Luther King General Hospital, Los Angeles
Japanese Memorial Foundation, Los Angeles
Downey Unified School District, Downey
E.L.A. Mental Health Service, Los Angeles
USC Student Health Center, Los Angeles
National Chicano Health Organization, Los Angeles
Artificial Kidney Center, Inc.
Visiting Nurse Association of Los Angeles
E.L.A. District Health Center, Los Angeles
Community Health Foundation of E.L.A., Los Angeles
E.L.A. Alcoholism Rehabilitation Clinic, Los Angeles
L. A. Community College District, Los Angeles
Lincoln Care Center, Los Angeles
Community Concern Corporation, Los Angeles
Plaza Community Center, E.L.A.
Los Angeles City Department of Public Works
Legal Aid Foundation, Los Angeles
E.Y.O.A., Los Angeles
E.L.A. Vocational Training Program, Los Angeles

Project 8 - East Los Angeles Health Manpower Consortium, Inc.

I. BACKGROUND

The area east of downtown Los Angeles is a large Chicano "barrio" (population 600,000) which also has a sizable Indian minority (about 30,000). All the problems of urban poverty are present here--27% of the Chicano population have incomes below the poverty level[1] and the national average income for the Indian is about $30 per week. Department of Health Statistics show that 35% of the population live in housing categorized as deteriorating or dilapidated. Unemployment (15%) is double that of all Los Angeles County and the median education is 9.4 years (compared to a State average of 12.1 years).

Health problem in the area are equally severe. In 23 of 24 diseases categories analyzed by the Health Department, East Los Angeles residents ranked first, second, or third among six city areas of comparable size. They have the highest fetal death rate and the highest incidence of tuberculosis. Indians share these health problems. The TB incidence among Indians is 8 times that of Whites; incidence for influenza and pneumonia is 2-1/2 times as great. Indian infant mortality is twelve points higher than the national average, and the average life span--44 years--is only 2/3 that of the White American. Alcoholism among the Chicanos and Indians in the target area is also very high.

The main barriers to health care for residents in East Los Angeles are language and transportation problems and the cultural acceptability of service. In 1960, 35% of East Los Angeles Chicanos were foreign-born. Many of these people speak only Spanish, and most health providers are not able to communicate with them. Cultural barriers are more difficult to document, but a common comment of Chicanos regarding the health care system is that they are not respected, and that health care providers do not consider their needs important. For example, a common area of confusion might be diet recommendations. Providers often prescribe diets which completely ignore the usual diet of the Chicano, or his ability to afford recommended foods. Similar problems exist among the Indians. Since the American Indian Free Clinic opened, Indians have come considerable distances to be seen at the Clinic because they feel more comfortable being treated in a clinic organized by and for Indians, whom they believe understand their problems. Conversely, many Los Angeles Chicanos travel to Mexico to obtain health services. Their willingness to drive three or more hours for health care reflects their desire to be treated by those who understand their culture and language.

In 1969, only 3.7% of all County health-related employees had Spanish surnames; in the higher level positions, the percentage dropped to zero. The situation among Indians is even worse. There are no Indian physicians in the area, only 12 nurses and one social worker.

[1] These data are taken from the document "East Los Angeles Health-A Community Report" (1970) which surveyed in detail approximately two-thirds of the HS/EA service area. Figures should be approximately the same for the entire East L.A. area.

Health care training programs have not dealt successfully with the problem of recruiting and retaining Chicano and Indian personnel in East Los Angeles. Entry level requirements vary, and because of inadequate preparatory education, lack of suitable counseling, and family and other pressures, many minority persons have trouble being admitted to and remaining in health training programs. But by far the most important barrier to the retention of individuals in training programs is financial; this not only includes the cost of tuition and books, but primarily refers to the subsistence needed for one's self and frequently one's family. With virtually no financial support available for persons desiring to enter one- or two-year health training programs, many minority persons are effectively prohibited from receiving any health training because the longer term training presents too great an initial obstacle. A possible approach to this problem might include work-study approaches and flexible scheduling.

Another factor which demonstrates the need for a HS/EA is the lack of coordination and articulation between various institutions and facilities involved in training of health manpower and the resultant duplication of effort. For example, inhalation therapy training is offered both through adult education and at the community college. The former is a one-year program which may lead to certification, but does not always; the community college has a two-year program leading to national registration. As in many communities, little or no credit is given for previous training or experience, making it difficult to climb the health career ladder. Also, most two-year programs do not give any credit for completion of one-year programs in the same field.

Thus, the Los Angeles East area is not only a medically underserved community, but also a medically undertrained area. To utilize the tremendous potential the community has for self-improvement, a well-planned health manpower development effort is essential. The community has recognized this need and has put a substantial amount of its resources into the formation of a community health manpower consortium. The consortium will attack health care problems in the area through improved manpower training; Chicano and Indian residents will be assisted in completing health training programs, thus helping to solve the service problems created in part by the lack of minority health professionals in the service area.

II. OVERAL OBJECTIVES

To form a community consortium to:

A. Coordinate the health related educational and clinical training programs in East Los Angeles, including a focus on entry requirements and upward and lateral mobility.

B. Emphasize the recruitment and retention of minority students into health-related occupations and encourage them to remain within the service area.

III. CURRENT AND PROJECTED ACTIVITIES

A. Consortium Structure: A non-profit corporation whose procedures identify the functions of the Board of Directors, advisory committees, and staff has been established to direct HS/EA activities.

B. Data Collection:

1. A survey instrument has been designed and a survey team organized. Initial year's data has been collected and analyzed.

2. Planning for computerized data bank has begun.

C. Training Program Information and Counseling:

1. Brochures on health training programs, financial requirements, and scholarship opportunities are prepared and regularly updated. Brochures are distributed at orientation programs at educational institutions.

2. Health training counseling teams are scheduled at junior high schools, high schools, and selected post-secondary schools.

D. Scholarship Program:

1. Sources of funds have been identified and dollar commitments obtained (on-going).

2. Criteria for stipends have been established and students in need identified.

3. Work-study programs have been established.

E. Funding: State and federal funding sources are being explored; local funding is also being developed.

IV. FIRST YEAR CRMP FUNDING: $98,222

Project 9 - Health Services/Educational Activities (Loma Linda)

Service Area Population: 1,162,733

Director: May-Jean Howard, R.N., M.S.
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San Bernardino, California
92401

MEMBER INSTITUTIONS

Educational Institutions

University of California - Riverside
Loma Linda University, Loma Linda
University of Redlands, Redlands
California State University - San Bernardino
Clarement Colleges, Claremont
Riverside City College, Riverside
San Bernardino Valley College, San Bernardino
Mt. San Jacinto, San Jacinto
College of the Desert, Palm Desert
Victorville Community College, Victorville
Chaffey College, Alta Loma
Barstow Junior College, Barstow

Clinical/Service Institutions

Desert Hospital, Palm Springs
Riverside County Health Department
San Bernardino Comprehensive Health Planning
San Bernardino County General Hospital, San Bernardino
Manpower Area Planning Council
Patton Hospital
Riverside Comprehensive Health Planning, Riverside
American Association of Retired Persons (Southern Inyo Chapter.)
Mono County Office of Education
Bridgeport General Hospital
Southern Inyo Hospital
Inyo County Health Department
Mono County Department of Social Welfare
Dental Hygienists Association
Mono County Unified School District
California Department of Mental Hygiene
Northern Inyo Hospital, Bishop
Mono County Board of Supervisors
Bishop Chamber of Commerce
Rural Manpower
Chamber of Commerce
Victorville Public Health Department
State Department of Rehabilitation
Needles Municipal Hospital
Palm Springs Medical Clinics, Inc.
Palo Verde Hospital
Indio Community Hospital
Valley Memorial Hospital
Springs Ambulance Service
Riverside County Heart Association
Eisenhower Medical Center
Indio Department of Public Health
Tri-County Dental Society
Grant Elementary School

Project 9 - Health Services/Educational Activities (Loma Linda)

I. BACKGROUND

The Loma Linda Health Services/Education Activities serves a target area of 50,000 square miles, which is about equal to the land area of the State of New York. Located in Southern California, it includes a mixture of densely populated areas around the cities of San Bernardino and Riverside where there is a sophisticated network of health resources and a vast expanse of desert and mountain territory where health resources are woefully inadequate. The rural areas include the wasteland of Death Valley and the highly productive farmland of the Coachella Valley. Because the agricultural system in Coachella Valley relies largely on migrant workers who do not form permanent population centers, medical and dental services have not developed to serve their needs. There are numerous resorts in this area which experience an influx of vacationers on weekends and "in season". This influx may increase the usual population by a factor of 10. At the same time, the regular physician manpower may be reduced by 50% when one of the two physicians leaves.

Loma Linda University and Medical School will serve as the University Health Science Center resource to the Consortium and HS/EA activities. This medical school has many years of experience developing outreach programs designed to make its specialized resources available to communities of need. However, the service area reaches as far as 400 miles from Loma Linda. Although there is a dearth of health manpower data for the total service area, it presently appears that the only course available for developing effective medical care services for the area is through increased use of allied health personnel and an effective emergency transportation system. Little has been done to coordinate efforts in training based directly on defined service needs. This will be the main function of the HS/EA.

II. OVERALL OBJECTIVES

A. To identify health manpower needs from the perspectives of service and training. This will include both allied health personnel and physician continuing education in metropolitan and rural areas.

B. To develop a consortia mechanism for the coordination of identified health manpower needs in the service area of Loma Linda (San Bernardino, Riverside, Inyo, and Mono Counties), and health manpower training and education.

III. CURRENT AND PROJECTED ACTIVITIES

A. <u>Coordination</u>:

1. The central staff of the HS/EA will serve as resource personnel

to the educational consortia as they coordinate their health manpower training programs.

2. A consorted effort will be made in conjunction with the Pomona Valley HS/EA to identify health needs and resources in the area common to both HS/EA's. Loma Linda will be primarily responsible for the collection and analysis of health manpower data while Pomona Valley will assume lead responsibility for the analysis of consumer attitudes regarding health manpower and services.

B. Consumer Education: To promote and distribute information whereby the consumer can learn to identify health resources in his community and become more knowledgeable in developing local planning for education and health delivery.

C. Health Manpower Data:

1. Development of an ongoing mechanism for collection and analysis of data.

2. Cooperative manpower survey with Department of Labor and Vocational Planning Commission.

3. In response to local need, the following data studies have been initiated:

a. Need for cytotechnology program.

b. Feasibility study for A.A. dental hygienist program.

c. Need for local limited licensure X-ray program.

d. Survey of upper division nursing programs, including ambulatory care and management.

e. Need for Aide to LVN program in rural areas.

D. Health Manpower Training Programs:

1. Mechanisms are being developed to coordinate metropolitan continuing education programs and to expand them as outreach programs in rural areas.

2. Innovative delivery systems are being developed (for example, a nurse-practitioner program for an Indian Reservation where no MD is available).

3. Promote educational consortia among area institutions for coordination of programs, and provide assistance to individual schools to maximize the benefit of their programs:

a. Technical assistance to University of the Redlands.

b. Analysis of nursing general education requirements.

4. Development of specific programs in response to data studies:

a. Establishment of one-to-one clinical laboratory technician-laboratory technologist program as a new method of continuing education.

b. Aide to LVN program established in Inyo County.

c. Establishment of local limited licensure X-ray facility.

5. Career Advisement Activities: Workshops as well as development and distribution of career resource book.

6. Publication of all continuing education workshops, conferences, etc. in Loma Linda HS/EA service area.

IV. FIRST YEAR CRMP FUNDING: $87,820

Project 10 - Coordinating Council for Education in Health Sciences for San Diego and Imperial Counties

Service Area Population: 1,434,337

Director: Mrs. Ann Bush
Address: 7610 Girard Avenue
Suites 200 - 201
La Jolla, California
92037

MEMBER INSTITUTIONS

Educational Institutions

California State University, San Diego
University of California, San Diego
University of San Diego, San Diego
Grossmont College
Imperial Valley College
Mira Costa College
Miramar College
Palomar College
San Diego City College, San Diego
San Diego Mesa College, San Diego
San Diego Evening College, San Diego
Southwestern Junior College

Clinical/Service Institutions

Naval Hospital Corps School, San Diego
Veterans Administration Hospital (San Diego)
San Diego County Medical Society
Imperial County Medical Society
San Diego County Dental Society
Comprehensive Health Planning Association of Imperial, Riverside and San Diego Counties
Mercy Hospital
Coordinating Council for Education in Health Sciences for San Diego and Imperial Counties
Coronado Hospital
Paradise Hills Convalescent Center
Imperial General Hospital
Imperial County Health Department
Calexico Hospital
El Centro Community Hospital
National Farm Workers Health Group
Hospital Council of San Diego
Pacific College of Medical and Dental Assistants
San Diego City Department of Education
Superintendent of Schools, Imperial County
Grossmont Health Occupations Educational Programs
University Hospital
Donald N. Sharp Memorial Hospital
Grossmont Hospital
San Diego City Schools
Bay General Hospital
Paradise Valley Hospital
Chula Vista Community Hospital
Friendship Homes, Incorporated
Friendship Manor Convalescent Center
Continana Convalescent Hospital
Vista Hill Hospital
Imperial County Education Center
Valley Convalescent Hospital
Fort Yuma Indian Hospital
Pioneers Memorial Hospital
Royal Convalescent Home
Fredericka Convalescent Hospital

Project 10 - Coordinating Council for Education in Health Sciences for San Diego and Imperial Counties

I. BACKGROUND

San Diego and Imperial Counties illustrate a mixture of characteristics as do several of the HS/EA service areas in California. San Diego, with a population density of 319 per square mile, is one of the fastest growing counties in the United States (31.4% increase between 1960-1970); Imperial County, on the other hand, has a quite stable population (3.3% increase) and a population density of only 18 per square mile. San Diego County is 94% urban, while Imperial County is a primarily rural agricultural area. Both counties have large Chicano populations. The Mexican-American Population Commission estimates that there are approximately 12% Chicanos in San Diego County and 51% in Imperial County. Thus, cultural and linguistic barriers to health care and consumer perceptions of care must be especially considered in local programs for training health professionals. Both counties have a similar age distribution, with 50% of the population under 25.

Educational and health care resources are excellent in the San Diego area. There is a campus of the University of California which includes a medical school; additionally there is a state university as well as many community colleges. There are three major medical research facilities in San Diego, 31 acute general hospitals in San Diego and Imperial Counties, and five acute psychiatric facilities. However, there is the expected maldistribution of resources. For example, of the 31 general hospitals, only four are located in Imperial County which has no psychiatric facilities. Manpower data confirms this trend. San Diego is at or above the national levels for most categories of health manpower; by contrast, Imperial County falls well below the national average in physicians, RN's, dentists, and LVN's. Thus, in addition to responding to the needs of poverty pockets in the San Diego urban area, and the special needs of minority populations, a major focus of the HS/EA program must be to foster outreach programs, and efficient utilization and coordination of the scarce health resources in Imperial County.

San Diego County has recognized for some time the need for coordination of resources. In 1969 a group of educational and clinical institutions associated to form the Coordinating Council for Education in Health Sciences for San Diego and Imperial Counties. This is the organization which has expanded as the HS/EA corporation. Several programs have been developed since the formation of the Council; these grew out of the initial planning years and have recently become operational.

1. Development of physicians assistant program which is now seeking funds for implementation of this pilot curriculum.

2. Program to enable LVN's to qualify as RN's with one year additional training is currently being tested at San Diego City College.

3. Council data indicated that the supply of RN's was such that an additional A.A. RN program at a local community college would be inappropriate.

4. Pilot program is being developed for California State University-San Diego which will train additional health science instructors for community colleges (in response to a need stated by the colleges.)

5. Coordination through the Council is enabling San Diego Naval Hospital Corpsmen to receive academic credit for hospital training (Medical Technician). Negotiations are currently underway to expand this program to additional content areas.

6. Core Curricula Task Force (instructors in basic sciences, allied health educators and representatives of those professions) is developing module of basic science components, i.e., an integrated basic science curricula, which will assure students entry into a variety of allied health professions.

II. OVERALL OBJECTIVES

Survey manpower needs and resources and, on the basis of this data bank, develop coordinated educational activities in the health sciences throughout San Diego and Imperial Counties for both basic and continuing education.

III. CURRENT AND PROJECTED ACTIVITIES

A. Consortium Structure:

1. Establish a non-profit corporation and select Board of Directors.

2. Establish committees, task forces, task groups and recruit staff (7 professionals).

3. Establish cooperative links with similar groups in the state and nation. Encourage exchanges of data and information, results of studies, curricula and course materials, learning resources, faculty, and, where appropriate, facilities.

B. Manpower and Training Data: Establish a Task Force to

1. Undertake studies of specific problem areas in the educational system.

2. Define which educational programs are needed in the community for both basic and continuing education.

3. Determine which academic institutions and/or clinical facilities should assume responsibility for specific programs.

(Task Groups have been formed to deal with each of the specific problem areas.)

C. Program Planning:

1. Review and coordinate education programs in health sciences

2. Ascertain appropriate involvement of academic institutions and clinical facilities in both basic and continuing education.

3. Coordinate the dissemination of information concerning educational opportunities in the health sciences, with special emphasis on recruitment at the secondary school level.

4. Develop mechanisms to relate the activities in the educational system to the manpower needs of the health care delivery system with particular attention to the changing patterns in health care.

5. Establish sub-areas for educational activities which correspond to health care service areas within the two counties.

D. Minority Involvement: Devise and implement in San Diego and Imperial Counties an educational plan that will see all minorities fully represented in all health professions.

E. Consumer Education: Establish a Consumer Health Education Task Force of the Coordinating Council to define the roles and responsibilities of the Coordinating Council and its member institutions, facilities, and organizations in consumer health education.

Many specific tasks have been accomplished or are underway in each of these activity areas. For example, in Minority Involvement, sources of funding are now being sought to enrich the health science education program at a minority Junior High School, and a Big-Brother program between Black health professionals and minority students has operated since February 1973.

IV. FIRST YEAR CRMP FUNDING: $140,990